

Notice of Allowability

Application No.	Applicant(s)
10/782,660	LAI ET AL.
Examiner	Art Unit
Thinh T. Nguyen	2818

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. This communication is responsive to 9/13/2005.
2. The allowed claim(s) is/are 1-20.
3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some* c) None of the:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

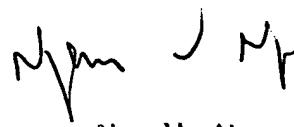
* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date _____.
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. Notice of References Cited (PTO-892)
2. Notice of Draftperson's Patent Drawing Review (PTO-948)
3. Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. Notice of Informal Patent Application (PTO-152)
6. Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. Examiner's Amendment/Comment
8. Examiner's Statement of Reasons for Allowance
9. Other _____.



Ngan Van Ngo
Primary Examiner

DETAILED ACTION

Reason for allowance

1. Claims 1-20 are allowed. The following is an examiner's statement of reason for allowance:

I/ Group I : Claims 1-8 : Claims 1-8 are allowed because none of the references of record teaches or suggests the claimed **LEAD FRAME AND SEMICONDUCTOR PACKAGE WITH THE SAME** having the limitations:

-- "A plurality of grounding portions protruded from the die pad and formed on at least a side of the die pad, each of the grounding portions having a grounding surface, wherein the thickness of the grounding portion is smaller than that of the die pad and a ground pad is formed on the grounding surface of each of the grounding portion:, allowing a plurality of grounding wires to be respectively bonded to the ground pads of the grounding portions and the semiconductor chip for transmitting ground signals; and a plurality of leads surrounding the die pad. for allowing a set of bonding wires to be bonded to the leads and the semiconductor chip so as to electrically connect the semiconductor chip to the leads. "--

and all other limitations as recited in claim 1.

II/ Group II : Claims 9-20 : Claims 9-20 are allowed because none of the references of record teaches or suggests the claimed **LEAD FRAME AND SEMICONDUCTOR PACKAGE WITH THE SAME** having the limitations:

--“ a die pad having a top surface and a bottom surface, with the semiconductor chip mounted on the top surface; a plurality of grounding portions protruded from the die pad and formed on at least a side of the die pad. Each of the grounding portions having a grounding surface and a bottom surface opposed to the grounding surface wherein the thickness of the grounding portion is smaller than that of the die pad, and a ground pad is formed on the grounding surface of each of the grounding portions allowing a plurality of grounding wires to be respectively bonded to the ground pads of the grounding portions and the semiconductor chip for transmitting ground signals; and a plurality of leads bonded with a set of bonding wires that are connected to the semiconductor chip so as to electrically connect the semiconductor chip to the leads via the set of bonding wire ; and an encapsulation body for encapsulating the semiconductor chip, the die pad, the grounding portion and part of the leads. “--
and all other limitations as recited in claim 9.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance".

Conclusion

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thinh T Nguyen whose telephone number is 571-272-1790. The examiner can normally be reached on Monday-Friday 9:00am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached at 571-272-1787. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9319 for After Final communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval [PAIR] system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thinh T Nguyen

TTN

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MJM ✓ M

Ngan Van Ngo
Primary Examiner